10

15

What is claimed is:

1. A gray level conversion method, applied to a device comprising;

a conversion section for obtaining a conversion signal by applying a conversion process to an input signal in accordance with a first characteristic; and

a display element for executing a display with a gray level in accordance with a second characteristic with respect to said value of said conversion signal,

wherein said first characteristic is set by using said second characteristic and a third characteristic with respect to said gray level in association with said input signal, said method comprising the steps of:

- (a) finding said value of said gray level given by said third characteristic in response to said value of the input signal;
- (b) finding said value of said conversion signal that gives said value of said gray level found at said step (a) in accordance with said second characteristic;
- (c) setting said first characteristic by making said value of said input signal set at said step (a) and said value of the conversion signal found at said step (b) associated with each other.
- 2. The gray level conversion method according to claim 1, wherein said third characteristic is variable.
- 3. The gray level conversion method according to claim 2, further comprising the step of:
- (d) prior to said step (b), finding said second characteristic by adopting a characteristic that makes said input signal and said conversion signal virtually equal

25

20

5

10

15

to each other as said first characteristic.

- 4. The gray level conversion method according to claim 3, wherein said value of said input signal is a digital value in said step (d).
- 5. The gray level conversion method according to plaim 1, wherein said display device is a liquid crystal display.
- 6. The gray level conversion method according to claim 5, wherein said gray level is luminance.
 - 7. A display device comprising:

a conversion section for obtaining a conversion signal by applying a conversion process to an input signal in accordance with a first characteristic; and

a display element for executing a display with a gray level in accordance with a second characteristic with respect to said value of the conversion signal,

wherein said first characteristic is externally found and set in said conversion section based upon said second characteristic and a third characteristic with respect to said gray level in association with said input signal.

- 8. The display device according to claim 7, wherein said third characteristic is variable.
 - 9. The display device according to claim 8, further comprising:
 a control section for generating a digital signal, said digital signal and said

20

25

5

input signal being supplied to said conversion section exclusively.

- 10. The display device according to claim 7, wherein said display device is a liquid crystal display.
- 11. The display device according to claim 10, wherein said gray level is luminance.